PII: S0278-6915(99)00095-2

# Index of Authors


Abel S., 497
Adams T. B., 249
Agrawal R. C., 975
Ahokas J., 321
Ahr H. J., 979, 997
Akagi A., 1065
Amacher D. E., 831
Andreoli C., 155
Arcadi F. A., 963
Arnold D. L., 771
Ataya D. G., 1085
Athar M., 485
Attias L., 37
Aughton P., 781
Avalos J. T., 183
Ayres P. H., 191

Bach P. H., 335
Baijal P. K., 601
Baqar S. M., 1125
Bär E. A., 1139
Barratt M. D., 233
Barton P. T., 455, 647
Basketter D. A., 199, 233, 327
Beamand J. A., 455, 647
Bernard L. G., 429
Bernardo-Filho M., 1079
Bernt W. O., 1139
Bestervelt L. L., 61
Bird R. P., 601
Black T., 1117
Black T. N., 397, 673
Blair M., 121
Blankemeyer J. T., 383
Blonk C. G., 663
Boatman R. J., 825
Bodnar J. A., 169
Bolte H. F., 575
Bombick D. W., 183, 191
Bomhard E., 979, 997
Bootman J., 849
Borgerding M. F., 169
Borzelleca J. F., 1139
Boysen B. G., 111, 135
Brooks K., 409
Brown E. D., 279, 289
Brown R. D., 1107
Brunnemann K. D., 997
Bryant M. A., 397, 673
Bu-Abbas A., 617
Burdock G. A., 347
Burkhardt J. E., 831
Butterworth L. F., 1107

Caldeira-de-Araújo A., 1079
Calvo P., 941
Cao J., 1061
Carere A., 155
Chagnon M., 915
Chang W.-C., 631
Chappel C. I., 81, 101, 111, 121, 135, 141, 915
Chen G. W., 761
Chen I. L., 513
Cheng H. M., 239
Cheng W.-Q., 563
Chiang M., 141
Chiarello P. G., 929
Chipman J. K., 375
Chou M. W., 1053
Chu I., 21
Chung H. L., 169
Chung J. G., 761
Chung K.-T., 1053
Ciacci-Zanella J. R., 791
Cifone M. A., 127
Clifford M. N., 617
Coenen T. M. M., 781
Cokelaere M., 13
Collins H. E., 585
Collins T. F. X., 397, 673, 1117
Costa C., 963
Costa G., 963
Crebelli R., 155

Daenens P., 13
Das M., 437
David R. M., 429, 609
Day A. J., 623
De B., 937
Dearman R. J., 199
Deckardt K., 165
Decuypere E., 13
Deisinger P. J., 521
Delzenne N. M., 555
Dethloff L. A., 61
Doolittle D. J., 183, 191
Doull J., 249
Drugarin D., 245
Dunkelberg H., 897
Durnev A. D., 1
Dutta A., 937
Dwivedi P. D., 437

Edenharder R., 637, 897
El-Nezami H., 321
English J. C., 609
Enzmann H., 979, 997
Eppley R. M., 397, 673

Faulkner B. C., 591
Feder P. I., 47, 209
Felton J. S., 279, 289
Felzenszwalb I., 1079
Fernández-Briera A., 941
Field W. E., 111
Fitzpatrick D. W., 601, 947, 955
Flamm G., 1139
Flo G., 13
Ford R. A., 249
Fort D. J., 591
Foster W., 21
Frangart J., 637
Freeman C., 705
Friedman M., 383
Fujimoto N., 697
Fujita H., 467
Furusawa N., 811
Furuya M., 445

Garleb K. A., 1085
Gelderblom W. C. A., 497
Gembardt C., 165
Gerberick G. F., 327
German J. B., 585
Gescher A., 375
Gettings S. D., 47, 209
Gil-Martín E., 941
Gingell R., 825
Gordon D. R., 429
Gott D., 849
Grasso P., 1015
Gray K., 141
Greer D. B., 249
Greger J. L., 505
Gu L.-Q., 563
Guest D., 521
Gupta S., 21
Guseva N. V., 1

Hager M., 637
Hagiwara A., 299
Hall R., 529
Hall R. L., 111
Hall-Manning T. J., 233
Hansen D. K., 397, 673
Hasegawa R., 1043
Hawley R. S., 585
Hayward S., 771
Helsby N. A., 375
Henwood S. M., 135
Hepburn P. A., 747
Hernaux N. A., 555
Hildebrand B., 165
Hines J., 233
Hintze K. L., 47, 209
Hiramoto K., 305
Hirose M., 299
Hofmann P., 637
Hojo H., 421
Holland G. H., 233
Hori M., 1073
Hosono A., 805
Howard P. C., 397, 673
Howes D., 711, 719
Hsieh C. L., 761
Hu M.-L., 755
Huang H.-P., 631
Hwang D. F., 239

Iatropoulos M., 979, 997
Iglesias A. C., 929
Ikeda G. J., 907
Imperatore C., 963
Inoue R., 467
Inoue T., 1043
Ioannides C., 315, 617
Iqbal M., 485
Ito A., 697
Itoh N., 811
Ivett J. L., 127
Izumi K., 1065

Jägerstad M. I., 879
James C. T., 719
Jeffery E. H., 365
Johansson M. A. E., 879
Jones C., 791

Jordao Jr A. A., 929
Juberg D. R., 429

Kai S., 1043
Kaneda M., 421
Kang J. J., 513
Kankaanpaa P., 321
Kato T., 305
Katz G. V., 429
Kawamura O., 445
Kennepohl E., 1139
Kerkhoff G., 897
Kerr D., 375
Khanna S. K., 437
Kikugawa K., 305
Kim S. K., 655
Kim Y. C., 655, 655
Kimber I., 199, 327
King R. S., 1033
Kingston S., 365
Kitano M., 811
Kitts D. D., 543
Kligman A. M., 867
Kligman L. H., 867
Klimisch H.-J., 165
Klopman G., 687
Knize M. G., 279, 289
van de Kooij A. J., 663
Kotkoskie L. A., 705
Kühn E., 13
Kumar S., 975
Kuratko C. N., 819
Kuroda K., 811
Kurokawa Y., 1043
Kusamran W. R., 475

Láborde J. B., 397
Laborde J. B., 673
Lake B. G., 455, 647
Lawlor T. E., 127
Lecavalier P., 21
Lee M.-J., 631
Levander O. A., 279, 289
Lewis S., 825
Li X., 305
Liang R., 563
Lin J., 445
Lin J. G., 761
Lin W.-L., 631
Lin Y.-L., 631
Liu D.-L., 563
Liu J. W., 1061
Llewellyn G. C., 1107
Lordo R. A., 47, 209
Lu Z., 1053
Lynch B. S., 1139

Ma L., 563
MacKenzie K. M., 111, 135
Macri C., 37
Maita K., 421
Maki S., 445
Malcolm S., 771
Mangan P. P., 169
Mann A. H., 1015
Mantovani A., 37
Maranghi F., 37
Marchese A., 963
Marin-Martinez M. L., 409
Maru G. B., 1131
Masuda T., 811
Matsushima T., 467
McCay J. A., 1107
McGuire P. F., 771
McWilliams M. L., 383
Mehrotra N. K., 1125
Meijer G. W., 663
Merrill Jr A. H., 791
Miller D., 771
Minami T., 1065
Mitchell S. C., 923
Miyake T., 841
Modderman J., 1139
Moreno F., 929
Morgan W. T., 183
Morinaga T., 1073
Morrison C. C., 169
Most E., 7
Moyer C., 609
Mukherjee A., 73, 937
Mukhopadhyay M. J., 73, 937
Munro I. C., 249, 529, 1139
Munson A. E., 1107
Murli H., 183
Murray F. J., 591
Musgrove D. L., 1107
Myhr B. C., 127

Nagao M., 467
Nakatani T., 697
Newberne P., 249
Newton P. E., 575
Nishimori T., 1073

O'Donoghue J. L., 609
Obatomi D. K., 335
Olejnik N., 397, 673, 1117
Oreshchenko A. V., 1
Otsuka H., 1065
Ozaki A., 811

Pacchierotti F., 155
Pakhale S. S., 1131
Pallauf J., 7
Palmer T. E., 135
Paquet A., 771
Patmore S. J., 61
Paunescu V., 245
Pelielo de Mattos J. C., 1079
Perry L. G., 521
Pestka J. J., 409, 1095
Poon R., 21
Portoghese P. S., 249
Price R. J., 455, 647
Procter B. G., 101
Propst T. L., 591
Putnam K., 191
Putnam K. P., 183

Rahi M., 575
Ramsey M. J., 467
Rapisarda A., 963
Ratanavila A., 475
Rauscher R., 637
Rayburn J. R., 383
Reed Bombick B., 183, 191
Rennie G., 233
Report M., 145
Revell P., 233
Reynolds R. C., 81, 95
Rhodes D., 279, 289
Rhodes M. J. C., 623
Ricciardi C., 37
Rimbach G., 7
Risner C. H., 169
Ritskes-Hoitinga J., 663
Rogers J. C., 169
Rorie J., 1117
Rorie J. I., 397, 673
Rosenkranz H. S., 687
Ross I. A., 907
Rossi S., 279
Rothman N., 279, 289
Roy G., 697
Ruggles D. I., 397, 673
Rumbeiha W. K., 1095

Sadrieh N., 1033
Saha A., 73, 937
Sai K., 1043
Sakaki S., 1073
Salemi M., 963
Salminen S., 321
Salmon C. P., 279, 289
Sano N., 1065
Sapienza P. P., 907
Schardein J. L., 135
Schlatter C., 971
Schlueter G., 979, 997
Schneider F., 245
Schomaker S. J., 831
Schramm D. D., 585
Schut H. A. J., 1033
Scimeca J. A., 391
Seki H., 1073
Seredenin S. B., 1
Shackelford M. E., 397, 673
Shephard G. S., 497
Shephard S. E., 971
Shibamoto T., 841
Shirai T., 299
Shubik P., 529
Shukla Y., 1125
Simmons D. F., 169
Sinha R., 279, 289
Skog K. I., 879
Smith M., 739, 743
Smith M. R., 747
Smith R. L., 249, 923
Smith S. Y., 915
Snyderwine E. G., 1033
Snyman S. D., 497
Sprando R. L., 397, 673, 1117
Staack R., 365
Stanescu D. I., 245
Stazi A. V., 37
Stover E. L., 591
Suber R. L., 575
Sugiura Y., 445
Sutherland J. E., 505
Swanevelder S., 497
Swanson C. A., 279

Takenaka H., 1073
Tamano S., 299
Tanaka H., 299
Tanaka N., 1073
Tanimura A., 1043
Taper H. S., 555
Tatu C. A., 245
Tepsuwan A., 475
Teramoto S., 421
Thomas B., 21
Tierney B. M., 61
Timmer W. G., 663
Tinkler J., 849
Tisdel P. J., 111, 135
Tjurina L. S., 1
Topping D. C., 429

Totman L. C., 609
Tredger J. M., 455
Trimarchi G. R., 963
Trucksess M. W., 397, 673
Tsai H.-H., 755
Tsuchida M., 1073
Tucker J. D., 467

Uehara H., 1065
Ueno Y., 445
Uhrig M. S., 169
Umemura T., 1043
Usman, 805

Valli V. E., 21
Van Boven M., 13
Van Schie B. J., 711
Vannucchi H., 929
Vermaut S., 13
Verschuren P. M., 663
Villani P., 155
Vlaovic M. S., 429
Volgareva G. M., 1
Vollmuth T. A., 591

Wagner B. M., 249
Walker R., 315, 617
Wallig M. A., 365
Walter A., 7
Walton K., 315
Wang C.-J., 631
Wang E., 791
Wang J., 947, 955
Wang L. C., 239
Watanabe H., 697
Watarai K., 1073
Weil C. S., 249
Weissenberg M., 383
Wendelboe F. N., 169
West A. J., 135
van der Westhuizen L., 497
Weststrate J. A., 663
Wheeler K. B., 1085
White Jr K. L., 1107
Wiersma A., 663
Wijewickreme A. N., 543
Williams G. M., 979, 997
Williamson G., 623
Wilson J. R., 947, 955
Wilson N. H., 575
Wilson R., 711, 719, 739, 743, 747
Wingate D. E., 169
Winkler L. S., 169
Wolf B. W., 1085
Wong S.-S., 409
Woods L. A., 249

Yamada A., 1073
Yamaguchi H., 811
Yamaguchi Y., 1073
Yan D., 1095
Yannai S., 623
Yao D.-S., 563
Yen-Yang H. F., 513
Yoshida M., 305
Young R. R., 127

Zandee J. C., 61
Zapponi G. A., 37
Zhang A. Q., 923
Zhang Y. P., 687
Zhao Y., 1061
Zhou H.-R., 409
Zijno A., 155
Zucoloto S., 929

PII: S0278-6915(99)00083-6

# Index of Subjects


**A(α)C (2-Amino-9*H*-pyrido-[2,3-*b*]indole)** DNA adduct formation and mammary gland bioassay 1033
**Abortion** petrochemicals and 3.VIII ... spontaneous and drinking water quality 6.V
**Acesulfame-K** chromosome damage and 3.I
**Acetochlor** fertility and 78
**Acrylates** respiratory diseases 3.IX
**Acrylic acid** reproduction and 152
**Acylamino acids** antibacterial agents properties of myristoyl-methionine 771
**ADMUL WOL** *see* Polyglycerol polyricinoleate (PGPR)
**Aflatoxin $B_1$** binding by *Lactobacillus rhamnosus* 321 ... detoxification by *Armillariella tabescens* enzymes 563
***Agaricus bisporus*** extract mutagenicity after baking/freeze-drying 315
**Agaritine** DNA binding 971
**Air fresheners** irritants 8.IV
**Air pollution** new mutagen 3.XI
**Albania** adult mortality rates 3.IV
**Albumin** bovine serum, allergy 4.III
**Alcoholization** free-choice drinking water ingestion in rats 941
**Alcohol** breast cancer and 4.I ... health benefits 149 ... *Helicobacter pylori* 150
**Algae** *Nostoc flagelliforme* safety evaluation as potential food 1073
**Alkaloids** in mainstream and sidestream tobacco smoke 1131
**Alkyl/allyl sulfides** liver enzyme activity and 78
**Allergens** glue and plastic 3.VIII ... test for rat urinary proteins 3.XI ... threshold for airborne latex 4.II
**Allergy** (*see also* Anaphylaxis) bovine serum albumin 4.III ... carmine 77 ... epoxypropane 3.IX ... herbal tea 6.II ... inhaled nicotine 8.IV ... latex and fruit 9/10.II ... latex rubber and children 3.X ... menthol testing 9/10.II ... nail varnish components 12.IV ... peanut dose threshold 3.II ... peppermint oil testing 9/10.II ... piperazine diacrylamide 3.VIII ... protease 6.IV ... sunscreens and photocontact 3.XII ... tin 12.III ... 2,4,6-tris(dimethylaminomethyl)phenol 9/10.VI
**"Alta"** depigmentation and 8.IV
**Aluminium** low dose toxicity 6.III ... oral dose and biliary *v.* urinary excretion 505
**Amaranth** immunosuppression and 3.I
**Ames *Salmonella typhimurium*** benzaldehyde mutagenic in new strains 6.IV
**Amino acids** daily requirements 8.I
**Amino peptidase** safety evaluation of enzyme from *Aspergillus niger* 781
**Anaphylaxis** carboxymethylcellulose 79 ... carmine 149 ... curry and 8.II ... millet 3.II ... pine nuts 4.III ... rambutan 12.II
**Anethole** taste loss 9/10.VIII
**Angiosarcoma** vinyl chloride and 12.III
**Antibacterial agents** acylamino acids and properties of myristoyl-methionine 771
**Anticancer properties** 4-methylsulfinylbutyl glucosinate 8.I ... auraptene 9/10.III ... carotenoids 3.V ... curcumins 3.V ... flaxseed 3.III ... ginseng 9/10.IV ... green tea 3.VI ... maltitol 8.I ... olive oil 8.II
**Antimony** NOAEL (no-observed-adverse-effect level) in drinking water 21 ... subchronic toxicity in drinking water in rats 21 ... toxicity 3.X
**Antimutagenicity** *Monascus* pigments 77
**Apoptosis** γ-hexachlorocyclohexane induction and intracellular $Ca^{2+}$ release pathway 513
**Aquacoat®** ECD ethyl cellulose toxicity and aequous dispersion 705
***Armillariella tabescens*** aflatoxin $B_1$ detoxification by enzymes of 563
**Aroclor 1254** Rhesus offspring sex ratios 451
**Arsenic** stroke and 79
**Artherosclerosis** n-3 polyunsaturated fatty acids (PUFA) and diet 663
**Arthritis** avocado, treatment 4.III ... cosmetic mineral oils and 4.IV
**Arylamine** *N*-acetyltransferase activity in human colon cancer cells and diallyl disulfide 761
**Asbestos** environmental exposure and cancer 3.IX ... non-occupational risks 9/10.IX
**Aspartame** mutagenicity 12.I
***Aspergillus niger*** safety evaluation of amino peptidase from 781 ... safety testing of aminopeptidase 12.I
**Aspirin** digestive tract cancer 6.V
**Assays** mammary gland and A(α)C DNA adduct formation 1033 ... mouse lymphoma 153 ... mouse skin tumour (review) 979 ... rat liver focus (review) 979
**Asthma** fruit processing enzymes and 8.III ... occupational and ethanolamines 8.III ... occupational and pectin 79
**Atherosclerosis** dietary fish oils and 663 ... malonaldehyde formation and Probucol 841
**Atractyloside** biochemistry and toxicology 335
**Auraptene** anticancer effects 9/10.III ... carcinogenic protection 149 ... citrus fruits and anticarcinogenicity 4.III
**Avocado** osteoarthritis treatment 4.III
**2,2'**-Azobis(2-amidinopropane)dihydrochloride dermatitis from 9/10.VI

**Bacteria** intestinal growth and tannic acid 1053
**Baking** mutagenicity effect on *Agaricus bisporus* extracts 315
**Balkan endemic nephropathy** haematotoxicity and 245
**Beans** *see specific types*
**Bee** toxicity and biological properties of propolis 347
**Beef** heterocyclic amines content after cooking by different methods 279
**'Bee glue'** *see* Propolis
**Benchmark dose** comparison with NOAEL for carbendazim toxicity 37
**Benzaldehyde** mutagenic in new Ames *Salmonella typhimurium* strains 6.IV
**Benzene** DNA binding 3.VII, 3.VIII ... multiple myeloma and 151

**Benzo[*a*]pyrene** fruit and vegetables protective effect against clastogenicity 637
**Betaine** chloroform hepatotoxicity and 655
**Beverages** sucrose acetate isobutyrate (SAID) toxicity studies (1988) 81
**Bile acids** colonic phase I and II xenobiotic metabolizing enzymes 601
**Biphenyl** genotoxicity 3.VI
**Births** ratio of male to female in industrialized countries 6.V
**Bis(2-ethylhexyl) phthalate** perinatal toxicity 963
**Bisphenol A** genotoxicity 3.XI ... oestrogenic activity 6.III, 9/10.IV
**Bitter gourd fruits** effect on enzyme activity and carcinogen activation 475
**Bladder tumours** sodium ascorbate and 9/10.I
**Blood–brain barrier** T-2 toxin permeability and monamine oxidase activity 955
**Blood pressure** (*see also* Hypertension) weight loss and reduction of sodium intake 6.II
**Bone mass** milk and young women 78
**Bovine serum albumin** allergy 4.III
**Brain** methylmercury exposure 153
**Breast cancer** alcohol and 4.I ... carotenoids and 3.V ... dietary fat and 4.I ... green tea and 8.II ... occupational xenoestrogens 9/10.VI ... smoking and 9/10.X
**Breast implants** connective tissue disorders 3.XI
**Brick tea** concentration and safety evaluation of fluorine in Pu'er and Bianxiao types 1061
**British Toxicology Society** BTS report on *in vitro* toxicology 153
**Broccoli** 4-methylsulfinylbutyl glucosinate anticancer properties 8.I ... colorectal cancer and 12.II
**Brussels sprouts** liver enzymes and 4.II
**1,3-Butadiene** mutagenicity in man 3.VIII
**Butter** oesophageal cancer and 9/10.II
**Butylated hydroxyanisole (BHA)** forestomach carcinogenicity 299 ... rat strain sensitivity to carcinogenicity 299
***tert*-Butylhydroquinone** distribution and excretion 907

**$Ca^{2+}$ release pathway** γ-hexachlorocyclohexane apoptosis induction and 513
**Cadmium** osteoporosis risk factor 9/10.V ... phytase effect on accumulation 7
**Caffeine** Frog Embryo Teratogenesis Assay–*Xenopus* (FETAX) evaluation of developmental toxicity of 591 ... green tea and induction of hepatic phase II enzymes 617 ... SIDS (sudden infant death syndrome) 3.I
**Calcium** colon cancer and drinking water 150 ... prostate cancer and 4.I ... release pathway, γ-hexachlorocyclohexane apoptosis induction and 513
**Cancer** *see* Carcinogenicity ... Tumours
**Capsaicinoids** carcinogenicity and 1065
**Carbamates** Propoxur carcinogenicity 1125
**Carbaryl** immune system and 12.III
**Carbendazim** toxicity comparison of NOAEL and benchmark dose 37
**Carbodiimide** sensitization 9/10.VIII
**Carbofuran** toxicity 6.III
**Carbon disulfide** occupational exposure 9/10.V
**Carboxymethylcellulose** anaphylaxis 79
**Carcinogenicity** auraptene protection 149 ... available experimental testing models 997 ... butylated hydroxyanisole (BHA) 299 ... capsaicinoids 1065 ... β-chloroprene 9/10.VI ... cigarettes and filters 153 ... fragrances 687 ... heterocyclic amines 879 ... nickel 9/10.VI ... photocopier toner 9/10.VIII ... piperonyl butoxide 9/10.IV ... propoxur 1125 ... review of short- and intermediate-term testing 979, 997 ... sucrose acetate isobutyrate (SAID) 111
**Carcinogens** potency labelling 3.XII ... Thai vegetables and activation of 475
**Cardioprotection** grape juice 4.III ... salicylates 77
**Cardiovascular disease** (*see also* Heart disease) methyl chloride 8.II
**Cardiovascular system** soya phytoestrogens 3.II
**3-Carene** guinea pig responses to 6.III
**Carmine** allergy 77 ... anaphylaxis 149
**β-Carotene** modulation of sister-chromatid exchanges 897
**Carotenoids** anticarcinogenic effects 3.V ... breast cancer and 3.V ... influence on cyclophosphamide and dioxidine clastogenic activities 1
**Cashew nuts** pectin cross-sensitization with 9/10.II
**Castor oil fatty acids** polyglycerol polyricinoleate (PGPR) glyceran ester 719
**Cataracts** vitamin C and 78
**CCK-B/gastrin receptor ligand** CI-988 gastric effects in cynomolgus monkeys 61
**Cell cycle arrest** fumonisin $B_1$ sphingolipid concentration and cyclin dependent kinase 791
**Cellulose triacetate** prostate cancer and fibre manufacture 3.VII
**Children** diet and cancer in adults 3.III ... latex rubber allergy 3.X ... peanut allergy persistence 8.II ... vehicle exhaust gases and cancer 6.V ... zinc and growth 3.V
**Chinese tea** low cholesterol 149
***p*-Chlorobenzotrifluoride** inhalation toxicity 3.XI
**Chloroform** betaine and hepatotoxicity 655
**β-Chloroprene** vapour carcinogenicity 9/10.VI
**Chlorpropham** toxicity and sea urchin embryos 9/10.V
**Cholesterol** Chinese tea and low levels 149 ... field beans and 3.III ... full-fat rice bran and blood 9/10.III ... psyllium-enriched cereals and blood 77 ... rhubarb stalk fibre and 3.III ... soya milk and 3.II
**Cholic acid** modulation of xenobiotic metabolizing enzymes 601
**Choline** dimethylamine formation and diet 923
**Chromosomes** aberrations and chronic feeding of MeIQ 467 ... acesulfame-K and damage 3.I ... meiotic segregation and quercetin diet, *Drosophila melanogaster* 585 ... toluene effects in print workers 6.III ... vitamin $B_{12}$ and damage 9/10.III
**CI-988** CCK-B/gastrin receptor ligand gastric effects in cynomolgus monkeys 61
**Cigarettes** (*see also* Smoking ... Tobacco) flavoured 9/10.IX ... lung carcinogenicity and filters 153 ... primary tobacco heating design 7.1, 169 ... *in vitro* toxicology of mainstream smoke condensate 183 ... *in vitro* toxicology of mainstream whole smoke 183 ... smoke from new type less mutagenic 6.V
**Clastogenicity** carotenoids influence on cyclophosphamide and dioxidine 1 ... fruit and vegetables protective effect against cyclophosphamide and benzo[*a*]pyrene 637
**Coffee** gastrointestinal cancer 4.I ... heart disease and 3.I ... *Helicobacter pylori* 150 ... modulation of metal-induced genotoxicity by Maillard reaction products from 543
**Colon cancer** broccoli and 12.II ... diallyl components of garlic and human cells 761 ... drinking water calcium 150 ... iron and manganese superoxide dismutase (MnSOD) activity in 819 ... pinto beans and 3.III ... squalene and 3.IV
**Colophony** fumes and respiratory effects 151 ... patch testing control 12.III
**Connective tissue** breast implants and disorders 3.XI
**Cooking** HCA content beef 279 ... pork 289
**Cooking oils** polyunsaturated fatty acids (PUFA) in 8.I
**Copper** toxicity and taurine 239
**Cosmetics** formaldehyde in 3.XII ... mineral oils and arthritis 4.IV ... skin irritancy testing in man 3.XII
**Coumarin** unscheduled DNA synthesis in liver slices 647
**Creatine** supplements and kidney function 8.II
**Cruciferous vegetables** induction of glutathione *S*-transferase and quinone reductase by glucosinolate derivatives 365

**Curcumins** anticarcinogenic effects 3.V
**Curry** anaphylaxis and 8.II
**Cyclin dependent kinase** fumonisin $B_1$ sphingolipid concentration and cell cycle arrest 791
**Cyclohexylamine** plasma SH group oxidation enhancement 755
**Cyclophosphamide** carotenoids influence on clastogenesis 1 ... fruit and vegetables protective effect against clastogenicity 637
**Cynomolgus monkeys** CCK-B/gastrin receptor ligand CI-988 gastric effects in 61
**Cystamine bislactamide** allergy 9/10.VIII
**Cytochrome *P*450** inhibition by isoflavonoids (genistein ... equol) 375 ... role in quinalphos toxicity of antioxidant enzymes 437
**Cytokines** type 2 induction and platinum salt exposure 199

**DDT isomers** oestrogenic activity 150
**Decamethylcyclopentasiloxane** inhalation toxicity 9/10.VII
**DEHP** low toxicity in primates 8.III
**Deoxycholic acid** modulation of xenobiotic metabolizing enzymes 601
**Depigmentation** "alta" and 8.IV
**Dermatitis** airborne contact , ethylene oxide 12.III ... 2,2'-azobis(2-amidinopropane)dihydrochloride 9/10.VI
**Desmutagenicity** *Lactobacillus acidophilus* cultured milk and tauco 805
**Detergents** improved testing of enzymes 9/10.VII
**Detoxification** aflatoxin $B_1$ by enzymes of *Armillariella tabescens* 563
**Diallyl sulfide/disulfide** arylamine *N*-acetyltransferase activity in human colon cancer cells 761
**Diet** childhood and cancer in adults 3.III ... lung cancer and 3.VI ... oral cancer and 3.III
**Dietary fat** breast cancer and 4.I
***N,N*-Diethylaniline** genotoxicity 3.VII, 3.VIII
**Diethylene glycol dimethyl ether** toxicity 9/10.VII
***N,N*-Diethylethanolamine** toxicity 9/10.VIII
**Diethylnitrosamine** vitamin E and necrogenicity 929
**Digestive tract cancer** *see* Gastrointestinal cancer
**Diisocyanates** mutagenicity testing 6.IV
**Dimethylamine** formation from amine precursors 923
**Dimethyl mercury** extreme human toxicity 9/10.VI
**Dioxidine** carotenoids influence on clastogenesis 1
**Dioxin** cancer in Seveso 153
**Diterpenoid glycosides** biochemistry and toxicology 335
**2,5-Di(*tert*-butyl)-1,4-hydroquinone** nerve damage 3.X
**Dithiocarbamate** accelerator residues risk assessment and latex-based medical devices 849
**Divinylbenzene** inhalation toxicity 151
**DNA** agaritine and binding 971 ... benzene binding 3.VII, 3.VIII ... breaking activity of hydroxyfuranones in soy sauce 305 ... coumarin and unscheduled synthesis in liver slices 647 ... fragmentation and $\gamma$-hexachlorocyclohexane 513 ... mammary gland bioassay of A($\alpha$)C adduct formation 1033 ... melanoidin modulation of damage 543 ... single strand breaks and Thiram 155 ... unscheduled synthesis in liver slices and cooked food mutagens 455 ... welders and damage 4.II
**Docosahexaenoic acid** dose–response 3.IV
**Dogs** methyl bromide dietary study in 575
**Draize eye test** oil/water emulsions 47 ... surfactant formulations 209
**Drinking water** (*see also* Water) nitrate and cancer 4.II ... spontaneous abortion and quality 6.V
***Drosophila melanogaster*** meiotic chromosome segregation and quercetin diet 585

**ECVAM Task Force** skin irritation tests proposals 8.IV
**Elderly** heart disease 150
**Emulsions** eye irritation tests for oil/water 47
**Enzymes** *Armillariella tabescens*, aflatoxin $B_1$ detoxification by 563 ... colonic phase I and II xenobiotic metabolizing 601 ... cytochrome *P*450 role in quinalphos toxicity of antioxidant 437 ... fruit processing and asthma 8.III ... improved testing by detergents 9/10.VII ... induction by glucosinolate derivatives 365 ... microsomes 4.IV ... screening for respiratory sensitization by detergent 80
**Epoxypropane** allergy 3.IX
**Epoxy resin** hardener allergy 9/10.VI
**Equol** cytochrome *P*450 inhibition 375
**Erratum** primarily tobacco heating cigarette (TOB-HT) and chemical composition of mainstream smoke 7.I
**Erythritol** safety data review 1139
**Ethanolamines** occupational asthma and 8.III
**3-Ethyl-1-propanol** toxicity 151
**Ethylenebis(dicarbamate)** genotoxicity 3.VI
**Ethylene glycol monomethyl ether** genotoxicity 4.II
**Ethylene glycol mono-*n*-butyl ether** acute toxicity in guinea pigs 825
**Ethylene oxide** airborne contact dermatitis 12.III
**2-Ethylhexanoic acid** oral toxicity 9/10.VII ... subchronic oral toxicity 429
**2-Ethylhexanol** inhalation study 8.III ... NOAEL (no-observed-adverse-effect level) 165 ... vapour inhalation toxicity 165
**5-Ethylidene-2-norborene** genotoxicity potential 8.III
**EU/COLIPA** Phototoxicity screen study 9/10.X
**Eye** Draize irritation test and surfactant formulations 209 ... irritation tests for oil water emulsions 47 ... low volume irritation test and surfactant formulations 209 ... *in vitro* irritation test 47 ... surfactant formulations 209 ... wine and age-related macular degeneration 3.II

**False positives** local lymph node assay and predictive skin sensitization tests 327
**Fats** (*see also* Lipids) mood changes and diet 3.IV ... *trans*-unsaturated and heart disease 77
**Fatty acids** (*see also* Polyunsaturated fatty acids (PUFA)) long chain polyunsaturated and infant development 12.I ... *trans*-unsaturated and heart disease 77
**Fertility** acetochlor and 78
**Fibre laxatives** flatulence and 3.III
**Field beans** cholesterol and 3.III
**Fish** stir frying and MeIQx bacterial mutagen 3.V
**Fish oils** dietary, atherosclerosis and 663
**Flatulence** fibre laxatives and 3.III
**Flavanols** green tea and induction of hepatic phase II enzymes 617
**Flavonoids** oestrogenic activity and 9/10.III ... quinone reductase induction and 623
**Flavour and Extract Manufacturers Association (FEMA)** GRAS assessment of lactone flavour ingredients 249
**Flavour** use of lactones 250
**Flavouring substances** safety evaluation principles of 529
**Flaxseed** anticarcinogenic activity 3.III
**Fluoride** long-term exposure and spermatogenesis morphology 1117 ... occupational genotoxicity 79
**Fluorine** concentration and safety evaluation in Pu'er Brick tea and Bianxiao brick tea 1061
**Folate** heart disease and 3.V
**Folic acid** lower homocysteine blood levels 6.II
**Food colour** UV irradiation decomposition and mutagenicity 811
**Forestomach** butylated hydroxyanisole (BHA) carcinogenicity 299
**Formaldehyde** cosmetics with 3.XII
**Fragrances** respiratory effects 9/10.VIII ... SAR analyses and potential carcinogenicity 687
**Freeze-drying** mutagenicity effect on *Agaricus bisporus* extracts 315

**Frog Embryo Teratogenesis Assay–*Xenopus*** (FETAX) evaluation of developmental toxicity of caffeine and metabolites 591
**Fructose** prostate cancer and 4.I
**Fruit** citrus, Auraptene and anticarcinogenicity 4.III ... processing enzymes and asthma 8.III ... protective effect against cyclophosphamide and benzo[*a*]pyrene clastogenicity 637
**Fumonisin $B_1$** developmental toxicity and pregnancy 673 ... inhibition of sphingolipid biosynthesis 497 ... pregnancy and 397 ... sphingolipid concentration, cyclin dependent kinase and cell cycle arrest 791

**Garlic** attenuation of iron-nitrilotriacetate (Fe-NTA)-mediated renal oxidative stress 485 ... diallyl components and human colon cancer cells 761 ... hypertension and 77 ... lipid-lowering effects 9/10.II
**Gastrointestinal cancer** (*see also* Colon cancer) aspirin and 6.V ... tea/coffee and 4.I
**Genistein** cytochrome *P*450 inhibition 375
**Genotoxicity** biphenyl 3.VI ... bisphenol A 3.XI ... bone marrow, sennosides 937 ... *N,N*-diethylaniline 3.VIII ... Ethylenebis(dicarbamate) 3.VI ... ethylene glycol monomethyl ether 4.II ... 5-ethylidene-2-norborene 8.III ... fluoride 79 ... glyphosate 12.III ... hydroquinones 3.XI ... isopropylammonium glyphosate 3.VII ... lignans, plant 6.IV ... lipids peroxidation 9/10.III ... modulation of metal-induced by Maillard reaction products from coffee 543 ... nitroanilines 3.IX ... nitrobenzene 3.IX ... organophosphate 3.VI ... printing inks and pigments 8.III ... propyl gallate 3.I ... pyrethroids 3.VII ... rimsulfron 12.III ... roundup 3.VII ... safrole 3.IV ... soy sauce 9/10.IV ... sucrose acetate isobutyrate (SAID) lack of 127 ... 1,2,3,4-tetrahydronaphthalene-1-hydroperoxide 9/10.VII ... titanium oxide after irradiation 152 ... triazine 8.II ... trimethylbenzenes 8.III ... vinclozolin 12.III
**Gestation** simmondsin or defatted jojoba meal effects on rat 13
**Ginseng** anticancer effects 9/10.IV
**Glucobrassicins** indole-3-carbinol prevention of cyclophosamide-induced micronucleus formation 975
**Glucosinolate** enzymes induction by derivatives of 365
**Glucuronosyl transferases** green tea and 617
**Glutathione** *S*-transferase green tea and 617 ... induction by glucosinolate derivatives from cruciferous vegetables 365 ... Thai vegetables effect on activity 475
**Glyceran esters** polyglycerol polyricinoleate (PGPR) and castor oil fatty acids 719 ... safety assessment and ingestion 719
**Glycoalkaloids** toxicology 383
**Glyphosate** genotoxicity 12.III
**Grape juice** cardioprotection and 4.III
**GRAS (Generally Recognized as Safe)** FEMA assessment of lactone flavour ingredients 249
**Gravy** HCA content and meat drippings 279
**Green tea** anticarcinogen effects 3.VI ... anti-genotoxicity 78 ... breast cancer and 8.II ... caffeine and flavanols induction of hepatic phase II enzymes 617 ... hepatotoxicity protective effects and 2-nitropropane 1043
**Guar gum** partially hydrolysed subchronic toxicity 3.II
**Guinea pigs** ethylene glycol mono-*n*-butyl ether acute toxicity in 825

**Haematotoxicity** Balkan endemic nephropathy and 245
**Headaches** triethylamine and 3.IX
**Heart disease** coffee and 3.I ... elderly 150 ... folate and vitamin $B_6$ 3.V ... ischaemic, whole grains and 12.II ... passive and active smoking 3.XI ... *trans*-unsaturated fats 77 ... turmeric 4.III
***Helicobacter pylori*** alcohol, coffee 150
**Hepatic enzymes** Brussels sprouts 4.II ... phase II, flavanols and green tea 617
**Hepatobiliary system** sucrose acetate isobutyrate (SAID) and human function 141
**Hepatotoxicity** 2-nitropropane and green tea protective effects 1043 ... chloroform and betaine 655 ... microsomal enzyme induction and 831
**Herbal tea** allergy 6.II
**Heterocyclic amines** content in beef cooked by different methods 279 ... formation, occurrence, intake and carcinogenicity review 879 ... gravy content and meat drippings 279 ... mammary gland bioassays and A(α)C 1033
**Hexachlorobenzene** occupational toxicity 6.III
**γ-Hexachlorocyclohexane** apoptosis induction and intracellular $Ca^{2+}$ release pathway 513 ... DNA fragmentation and 513
**Hexamethylphosphoramide** oral toxicity 151
**Homocysteine** folic acid and vitamin $B_{12}$ lower blood levels 6.II
**α-Hop acids** subchronic toxicity in dogs 915
**Human immunodeficiency virus (HIV)** *Lactobacillus reuteri* supplement safety and tolerance 1085
**Hydroquinones** dermal cream application and toxicity 609 ... genotoxicity 3.XI ... nephrotoxicity and 609
***p*-Hydroxybenzoic acid** oestrogenicity 3.I
**Hydroxyfuranones** DNA breaking activity in soy sauce 305
**Hypertension** (*see also* Blood pressure) garlic and 77 ... linseed oil and 77 ... salt intake and 8.I ... sugar intake and 4.III

**IgA monoclonal antibodies** vomitoxin-induced and nephropathy 1095
**Immunoaffinity column-linked HPLC** ochratoxin A toxicity 445
**Immunoassay** ochratoxin A toxicity 445
**Immunosuppression** amaranth and 3.I ... tartrazine and 3.I
**Immunotoxicity** patulin and 1107
**Indian smoking products** alkaloids in tobacco smoke 1131
**Indigo carmine** UV irradiation and mutagenicity 12.I
**Indole-3-carbinol** prevention of cyclophosamide-induced micronucleus formation 975
**Insulin** resistance and vitamin D deficiency 6.I ... trichloroethylene and 4.II
**Interleukin-1β** vomitoxin modulation of secretion 409
**Interleukin-6** vomitoxin modulation of secretion 409
**Intestine** (*see also* Colon cancer ... Gastrointestinal cancer) bacterial growth and tannic acid 1053
**Iran** EU ban on pistachio nuts 3.II
**Iron** manganese superoxide dismutase (MnSOD) activity and colon cancer 819
**Iron-nitrilotriacetate (Fe-NTA)** garlic oil attenuation of oxidative renal stress 485
**Irradiation** titanium oxide and genotoxicity 152
**Irritants** air fresheners 8.IV
**Ischaemic heart disease** (*see also* Heart disease) whole grains and 12.II
**Isoflavonoids** cytochrome *P*450 inhibition 375
**Isohumulones** subchronic toxicity in dogs 915
**Isopropylammonium glyphosate** genotoxicity 3.VII

**Jet fuel** lung toxicity 9/10.VII
**Jojoba** defatted meal effects on rat gestation 13

**Kidney cancer** vegetables and 9/10.III
**Kidneys** (*see also* Renal stress) creatine supplements and 8.II ... oral dose aluminium and urinary excretion 505
**Kojic acid** oral administration and thyroid tumour induction 697

**Konjac flour** sensitization 3.V

**Lactic acid bacteria** *see Lactobacillus sp.*
***Lactobacillus acidophilus*** desmutagenicity of cultured milk and tauco 805
***Lactobacillus reuteri*** supplement safety and tolerance and potential HIV infections 1085
***Lactobacillus rhamnosus*** aflatoxin $B_1$ binding by 321
**Lactones** chemical identity 250 ... FEMA GRAS assessment of flavour ingredients 249 ... flavour use 250 ... metabolism 251 ... toxicology 255
**Latex** allergy and fruit 9/10.II ... allergy in children 3.X ... glove quality control 3.X ... medical devices and dithiocarbamate accelerator residues risk assessment 849 ... non-allergenic respiratory problems 3.XI ... rate of sensitization to 6.III ... threshold for airborne allergens 4.II
**Laxatives, fibre** flatulence and 3.III
**$LD_{50}$ tests** 3.XIII
**Lead** phytase effect on accumulation 7
**Lignan** genotoxicity of plant 6.IV
**Linoleic acid** conjugated toxicity 391
**Linseed oil** hypertension and 77
**Lipids** (*see also* Fats) fat intake and serum 3.IV ... peroxidation and genotoxicity 9/10.III
**Lithium** skin disease and consumption 152
**Lithocolic acid** modulation of xenobiotic metabolizing enzymes 601
**Liver** (*see also* Hepatic enzymes) Brussels sprouts and enzymes of 4.II ... cooked food mutagens and unscheduled DNA synthesis in slices 455 ... enzyme activity and alkyl/allyl sulfides 78 ... oral dose aluminium and excretion 505
**Low volume eye test** oil/water emulsions 47
**Lung** carcinogenicity and cigarette filters 153
**Lung cancer** diet and 3.VI ... lycopene and 78 ... metal workers risk 12.III ... theaflavins 3.VI
**Lycopene** lung cancer and 78
**Lymphoma** mouse assays 153

**Maillard reaction** modulation of metal-induced genotoxicity by products from coffee 543
**Malonaldehyde** formation and probucol 841
**Maltitol** anticancer activity 8.I
**Mammary gland bioassay** A(α)C and DNA adduct formation DNA 1033
**Manganese superoxide dismutase (MnSOD)** iron and activity in colon cancer 819
**Meat** diet, cancer and genetics 12.II
**Medical devices** dithiocarbamate accelerator residues risk assessment and latex-based 849
**Meiotic chromosome segregation** in *Drosophila melanogaster* on quercetin diet 585
**MeIQ (2-amino 3,4-dimethylimidazo[4,5-*f*]quinoline** chromosome aberrations and chronic feeding 467 ... human metabolism of 6.II ... stir frying fish and mutagen 3.V
**Melanoidin** modulation of DNA damage 543
**Melatonin** contaminants in commercial preparations of 6.II
**Menhaden oil** steatosis and 555
**Menstrual cycle** PCB exposure and 3.VI
**Menthol** allergy testing 9/10.II
**Metals** Maillard reaction products from coffee modulate induced-genotoxicity 543
**Methoxychlor** reproductive toxicity 150
**3-Methyl-1-butanol** toxicity 151
**Methyl bromide** dietary study in dogs 575 ... and oral teratogenicity 421 ... subchronic toxicity 9/10.IV
**Methyl chloride** cardiovascular disease and 8.II
***N*-Methyl ethanolamine** sensitising potential 6.IV
**Methylmercury** maternal exposure and brain function 153
**4-Methylsulfinylbutyl glucosinate** anticancer properties in broccoli 8.I
**Methylxanthines** developmental toxicity 591
**Microcystin** fatal poisoning 9/10.VIII
**Micronuclei** Thiram mutagenicity 155
**Microsomes** enzyme induction and hepatotoxicity 831 ... *in vitro* solvents and enzymes 4.IV
**Milk** bone mass and young women 78
**Millet** anaphylaxis 3.II
**Monamine oxidase** T-2 toxin blood–brain barrier permeability and activity 955
***Monascus*** anti-mutagenicity of pigments 77
**Monoethanolamine** reproductive toxicity 152
**Monooxygenases** Thai vegetables effect on activity 475
**Mood changes** low fat diet and 3.IV
**Mortality statistics** Albania adult rates 3.IV
**Mouse** hairless model for chronic toxicity of topical chemicals 867
**Mouse skin tumour assay** review 979
**Multiple myeloma** benzene and 151
**Mushrooms** *see specific types*
**Mutagenicity** aspartame 12.I ... baking effect on *Agaricus bisporus* extracts 315 ... benzaldehyde in new Ames *Salmonella typhimurium* strains 6.IV ... 1,3-butadiene 3.VIII ... cooking oils and fumes 12.II ... diisocyanates, testing 6.IV ... indigo carmine 12.I ... terpineol 12.I ... tetravinyl-tetramethylcyclotetrasiloxane 3.XII ... thiram (tetramethylthiuram disulfide) and testing in mice 155 ... UV irradiation decomposition of food colours 811
**Mutagens** PBTA-1 80 ... and unscheduled DNA synthesis in liver slices 455
**Mycotoxins** (*see also specific types*) fumonisin $B_1$ and pregnancy 397
**Myristoyl-methionine** antibacterial properties of acylamino acids 771

**Nail varnish** components allergy 12.IV
**Nephropathy** Balkan endemic 245 ... vomitoxin-induced IgA Mabs and 1095
**Nephrotoxicity** hydroquinones cream application and toxicity 609
**Nerves** 2,5-di(*tert*-butyl)-1,4-hydroquinone damage 3.X
**Nickel** occupational carcinogenicity 9/10.VI
**Nicotine** allergy to inhaled 8.IV
**Nitrate** drinking water and cancer 4.II
**Nitroanilines** genotoxicity 3.IX
**Nitrobenzene** genotoxicity 3.IX
**2-Nitropropane** green tea hepatotoxicity protective effects and 1043
***N*-Nitroso-*N*-(3-keto-1,2-butanediol)-3′-nitrotyramine** tumour promoter effect 631
**NOAEL (no-observed-adverse-effect level)** antimony in drinking water 21 ... comparison with benchmark dose for carbendazim toxicity 37 ... sucrose acetate isobutyrate (SAID) 121
***p*-Nonylphenol** oral toxicity 151
***Nostoc flagelliforme*** safety evaluation as potential food 1073
**Nutrients** supplements potentially harmful 9/10.III
**Nutrition** implications of macronutrient substitutes conference report 145
**Nuts** (*see also* Peanut) cashew, pectin cross-sensitization with 9/10.II ... pine, anaphylaxis 4.III ... pistachio , EU ban on Iranian 3.II

**Occupational asthma** ethanolamines 8.III ... pectin 79
**Occupational carcinogenicity** nickel 9/10.VI
**Occupational exposure** carbon disulfide 9/10.V
**Occupational exposure limits** 12.III, 12.IV
**Occupational toxicity** genotoxicity of fluoride 79 ... hexachlorobenzene 6.III

**Ochratoxin A** human toxicity study in Tokyo 445 ... immunoassay and immunoaffinity column-linked HPLC 445
**Oesophageal cancer** butter and 9/10.II ... metalworking fluids and 9/10.VI
**Oestrogenic activity** phthalates 79 ... *p*-Hydroxybenzoic acid 3.I
**Oestrogens** (*see also* Phytoestrogens) bisphenol A and activity 6.III ... DDT isomers and activity 150 ... environment and 4.II ... flavanoids and activity 9/10.III ... occupational xenoestrogens and breast cancer 9/10.VI ... screening test reliability 9/10.III
**Oils** cooking and fumes mutagenicity 12.II ... hydrogenated vegetable, and stroke 9/10.II
**Olestra** low-dose gastrointestinal effects 149
**Oleth-3-phosphate** sensitization 80
**Oleth-5-phosphate** sensitization 80
**Olive oil** anticancer properties 8.II
**Oral cancer** diet and 3.III ... smokeless tobacco and 1015
**Oral $LD_{50}$ Test** validation of alternatives 12.IV
**Oral toxicity** 2-ethylhexanoic acid and subchronic 429
**Organophosphate** genotoxicity 3.VI
**Osteoarthritis** avocado/soybean treatment 4.III
**Osteoporosis** cadmium risk factor 9/10.V

**p53 protein** vinyl chloride exposure and mutant 6.III
**Paraffin** long-term feeding of liquid 3.X
**Paraquat** respiratory tract and 3.VI
**Patulin** immunotoxicity and 1107
**PBTA-1** new mutagen 80
**PCBs** *see* Polychlorinated biphenyls (PCBs)
**Peanut** allergy and dose threshold 3.II ... allergy persistence in children 8.II
**Pectin** cross-sensitization with cashew nuts 9/10.II ... occupational asthma and 79
**Pectinesterase** safety of 12.I
**Peppermint oil** allergy testing 9/10.II
**Pesticides** pregnancy outcome after male exposure 3.VII ... regulatory testing and second species choice 9/10.V ... sheep reproductive hormones and 9/10.IV
**Petrochemicals** abortion and 3.VIII
**Petrol** multiple chemical sensitivity 9/10.VII
**Pharmaceutical coatings** Aquacoat® ECD ethyl cellulose aqueous dispersion toxicity and 705
**Pharmacokinetics** sucrose acetate isobutyrate (SAID) 95 ... sucrose octaisobutyrate (SOIB) 95
**Phenylalanine** daily requirements 8.I
***o*-Phenyl phenol** genotoxicity 3.VI
**Phosphine** inhalation toxicity 9/10.V
**Photocopier toner** lung carcinogenicity 9/10.VIII
**Phototoxicity screen** EU/COLIPA study 9/10.X
**di(2-ethylhexyl)Phthalate** percutaneous absorption from PVC film 521
**Phthalates** oestrogenic activity 79
**Phytase** effect on zinc bioavailability and cadmium and lead accumulation in rats 7 ... sensitization 79
**Phytoestrogens** (*see also* Oestrogens) benefits 8.II ... cardiovascular system and soya 3.II ... resveratrol 3.II
**Phytosterols** lipid metabolism and 9/10.I
**Pigments** anti-mutagenicity of *Monascus* 77 ... printing inks and genotoxicity of 8.III
**Pine nuts** anaphylaxis 4.III
**Pinto beans** colon cancer and 3.III
**Piperazine diacrylamide** allergy 3.VIII
**Piperonyl butoxide** carcinogenicity 9/10.IV
**Pistachio nuts** EU ban on Iranian 3.II
**Platinum** type 2 cytokines induction and salt exposure 199
**Polychlorinated biphenyls (PCBs)** exposure and menstrual cycle 3.VI ... fish contamination and mink reproduction 9/10.IV
**Polyglycerol polyricinoleate (PGPR)** carcinogenic potential 747 ... digestion, metabolism and excretion 719 ... human toxicology studies 743 ... preparation, use and biological properties 711 ... safety assessment 711
**Polyoxyethylene surfactants** instability 9/10.X
**Polystyrene** skin reactions 3.XII
**Polyunsaturated fatty acids (PUFA)** cooking oils and 8.I ... long chain and infant development 12.I ... n-3 , diet and atherosclerosis 663
**Polyvinyl chloride (PVC)** exposure and testicular cancer 3.VII ... skin absorption of di(2-ethylhexyl)phthalate from film 521
**Pork** heterocyclic amines content after cooking by different methods 289
**Post-menopausal hot flushes** soya supplements and 4.III
**Potassium iodide** salivary gland cancer 6.IV
**Pregnancy** developmental toxicity and fumonisin $B_1$ 673 ... fumonisin $B_1$ and 397 ... outcome after male pesticide exposure 3.VII
**Primarily tobacco heating cigarette (TOB-HT)** and chemical composition of mainstream smoke 7.I (Erratum), 169
**Printing inks** genotoxicity of pigments 8.III
**Print workers** chromosome effects and toluene 6.III
**Probiotics** *Lactobacillus reuteri* supplements and HIV 1085
**Probucol** blood plasma oxidation 841 ... malonaldehyde formation and 841
**Propolis** toxicity and biological properties 347
**Propoxur** carcinogenicity 1125
**Propyl gallate** genotoxicity 3.I
**Prostate cancer** calcium, fructose and vitamin D 4.I ... cellulose triacetate fibre manufacture 3.VII ... selenium and 12.II ... vitamin E supplements 6.I
**Protease** allergy 6.IV
**Psyllium** enriched cereals and blood cholesterol 77
**PVC** *see* Polyvinyl chloride (PVC)
**Pyrethroids** genotoxicity 3.VII

**Quercetin** meiotic chromosome segregation in *Drosophilia melanogaster* 585
**Quinalphos** cytochrome *P*450 role in toxicity of antioxidant enzymes 437
**Quinone reductase** flavonoids and induction 623 ... induction by glucosinolate derivatives from cruciferous vegetables 365

**Rambutan** anaphylaxis 12.II
**Rat liver focus assay** (review) 979
**Rats** strain sensitivity to BHA carcinogenicity 299
**Rat urinary proteins** allergens test 3.XI
**Reactive oxygen species** shark-cartilage containing preparation scavenger activity 1079
**Rectal cancer** broccoli and 12.II
**Renal stress** garlic oil attenuation of iron-nitrilotriacetate (Fe-NTA)-mediated oxidative 485
**Reproduction** acrylic acid and 152 ... simmondsin or defatted jojoba meal effects on rat gestation 13 ... sucrose acetate isobutyrate (SAID) and 135
**Respiratory diseases** acrylates 3.IX ... triphenylmethane triisocyanate and 151
**Resveratrol** phytoestrogen 3.II
**Retinal** modulation of sister-chromatid exchanges 897
**Retinol** skin cancer suppression 150
**Rhubarb** cholesterol and stalk fibre 3.III
**Riboflavin** modulation of sister-chromatid exchanges 897
**Rice** full-fat bran and blood cholesterol 9/10.III
**Rimsulfron** genotoxicity 12.III
**Roundup** genotoxicity 3.VII
**Rubber latex** *see* Latex

**Saccharin** long-term study in monkeys 6.I

**Safety** (*see also specific chemicals*) alternative test methods 9/10.X ... principles of evaluation of flavouring substances 529
**Safrole** genotoxicity 3.IV
**Salicylates** and cardioprotection 77
**Salivary glands** potassium iodide and cancer 6.IV
**Salt intake** (*see also* Sodium) hypertension and 8.I
**Sarin** sister-chromatid exchanges and 12.III
**Sennosides** bone marrow genotoxicity 937
**Seveso** cancer and dioxin exposure 153
**Sex ratios** Arochlor 1254 and Rhesus offspring 451 ... births in industrialized countries 6.V
**Shark-cartilage containing preparation** reactive oxygen species scavenger activities 1079
**Shiitake mushrooms** adverse reactions to 9/10.I
**SIDS (sudden infant death syndrome)** caffeine 3.I
**Silica** TLV for amorphous fume 3.IX
**Simmondsin** effects on rat gestation 13
**Sinonasal cancer** in dogs 12.IV
**Sister-chromatid exchanges** sarin and 12.III ... vitamins modulation of 897
**Skin** absorption of di(2-ethylhexyl)phthalate from PVC film 521 ... cosmetic darkening 9/10.VIII ... dimethyl sulfoxide exposure and symptoms 6.IV ... disease and lithium consumption 152 ... false positives and local lymph node assay 327 ... hydroquinones cream application and toxicity 609 ... irritation and mixed surfactants 233 ... lithium consumption and disease 152 ... polystyrene and reactions 3.XII ... stinging as predictor of other reactions 3.XII
**Skin cancer** mouse (review) 979 ... retinol and suppression 150
**Skin irritation test** cosmetics 3.XII ... ECVAM Task Force proposals 8.IV
**Smoke** cigarette mainstream 7.1, 169 ... condensate *in vitro* toxicology 183 ... whole *in vitro* toxicology 191 ... tobacco alkaloids in mainstream and sidestream 1131
**Smoking** (*see also* Cigarettes ... Tobacco) breast cancer and 9/10.X ... passive 9/10.IX ... passive/active, heart disease and 3.XI ... racial differences and susceptibility 9/10.IX
**Sodium** (*see also* Salt intake) weight loss, blood pressure and reduction of intake 6.II
**Sodium ascorbate** bladder tumours and 9/10.I
**Solamargine** glycoalkaloid toxicology 383
**Solasonine** glycoalkaloid toxicology 383
**Solvent** exposure and colour impairment 151
**Soy** effects of protein on small intestine 6.II ... supplements and post-menopausal hot flushes 4.III
**Soya milk** cholesterol and 3.II
**Soy bean** availability of hydrogenated oil 9/10.II ... osteoarthritis treatment 4.III
**Soy sauce** DNA breaking activity of hydroxyfuranones in 305 ... genotoxicity 9/10.IV
**Spermatogenesis** long-term fluoride exposure and morphology 1117
**Sperm studies** bias 8.III
**Sphingolipids** fumonisin $B_1$ inhibition of biosynthesis 497
**Squalene** colon cancer and 3.IV
**Steatosis** menhaden oil and 555
**Steviol** toxicity 9/10.I
**Stroke** arsenic and 79 ... hydrogenated vegetable oils and 9/10.II ... incidence and fat intake 3.IV
**Structure–Activity relationship (SAR )** analyses and potential carcinogenicity of fragrances 687
**Sucrose acetate isobutyrate (SAID)** beverage toxicity studies (1988) 81 ... carcinogenicity 111 ... human hepatobiliary function and 141 ... lack of genotoxic effects 127 ... NOAEL (no-observed-adverse-effect level) 121 ... oral toxicity 111 ... oral toxicity studies in the Cynomolgus monkey 121 ... pharmacokinetics 95 ... reproduction 135 ... subchronic toxicity in rats and dogs 101 ... teratology studies 135 ... toxicity programme 6.I
**Sucrose octaisobutyrate (SOIB)** pharmacokinetics 95
**Sudden infant death syndrome (SIDS)** caffeine 3.I
**Sugar** hypertension and intake 4.III
**Sulfhydryl groups** cyclohexylamine oxidation enhancement in plasma 755
**Sunscreens** photocontact allergy 3.XII
**Surfactants** eye irritation test data and 209 ... skin irritation and mixed 233
**Sweet basil** effect on enzyme activity and carcinogen activation 475
**Sweeteners** Acesulfame-K and chromosome damage 3.I ... low calorie and erythritol safety data review 1139

**T-2 toxin** blood–brain barrier permeability and monamine oxidase activity 955 ... mycotoxin neurotoxicity 947
**Tannic acid** intestinal bacterial growth and 1053
**Tartrazine** immunosuppression and 3.I
**Taste loss** anethole 9/10.VIII
**Tauco** desmutagenicity of *Lactobacillus acidophilus* cultured milk and 805
**Taurine** copper toxicity and 239
**Tea** (*see also specific types*) gastrointestinal cancer 4.I
**Teratogenicity** oral, methyl bromide 421 ... phthallic acid 3.XI ... sucrose acetate isobutyrate (SAID) and 135
**Terpineol** mutagenicity 12.I
**Testicular cancer** PVC exposure 3.VII
**1,1,2,2-Tetrachloroethylene** neurotoxicity 4.II
**1,2,3,4-Tetrahydronaphthalene-1-hydroperoxide** genotoxicity 9/10.VII
**Tetravinyl-tetramethylcyclotetrasiloxane** mutagenicity 3.XII
**Thai vegetables** effect on enzyme activity and carcinogen activation 475
**Theaflavins** lung cancer 3.VI
**Thiabendazole** genotoxicity 3.VI
**Thiram (tetramethylthiuram disulfide)** DNA single strand breaks and 155 ... micronuclei and mutagenicity 155
**Thyroid** kojic acid oral administration and tumour induction 697
**Tin** allergy 12.III
**Tissue necrosis factor-α** vomitoxin modulation of secretion 409
**Titanium oxide** irradiation and genotoxicity 152
**Tobacco** (*see also* Cigarettes ... Smoking) alkaloids in mainstream and sidestream smoke 1131 ... primary heating cigarette design smoke chemical analysis 7.1, 169 ... smokeless and oral cancer 1015
**α-Tocopherol** modulation of sister-chromatid exchanges 897
**Toluene** colour vision impairment and 3.VIII ... print workers chromosome effects and 6.III ... urine biomarker and exposure 3.VIII
**Toxicity** comparison of NOAEL and benchmark dose for carbendazim 37 ... hairless mouse test model for topical chemicals 867 ... oral sucrose acetate isobutyrate (SAID) 111 ... oral sucrose acetate isobutyrate (SAID) and the Cynomolgus monkey 121 ... review of sucrose acetate isobutyrate (SAID) and beverages 81 ... subchronic and sucrose acetate isobutyrate (SAID) 101
**Toxicology** BTS report on *in vitro* 153
**Triazine** environmental levels and genotoxicity 8.II
**2,4,6-Tribromophenol** reproductive effects 6.III
**Tributyl phosphate** reproductive toxicity 152
**Trichloroethene** acute toxicity 8.II
**Trichloroethylene** insulin and 4.II
**Trichothecenes** T-2 toxin neurotoxicity 947
**Trichothecene vomitoxin** *see* Vomitoxin
**Triethylamine** headaches and 3.IX
**Triethylene glycol ethers** toxicity 3.IX
**Trimethylbenzenes** genotoxicity potential 8.III

**Trimethylphosphate** long-term toxicity 152
**1,3,5-Trinitrobenzene** toxicity 9/10.VIII
**Triphenylmethane triisocyanate** respiratory disease and 151
**2,4,6-Tris(dimethylaminomethyl)phenol** allergy 9/10.VI
**Tumour induction** kojic acid oral administration and thyroid 697
**Tumours** (*see also* Carcinogenicity) *N*-Nitroso-*N*-(3-keto-1,2-butanediol)-3′-nitrotyramine promoter effect 631
**Turmeric** heart disease 4.III
**Tyrosine** daily requirements 8.I

**Uranium** ingestion and kidney function 9/10.VIII
**Ursodeoxycholic acid** modulation of xenobiotic metabolizing enzymes 601
**UV irradiation** food colour decomposition and mutagenicity 811

**Vapour inhalation** 2-ethylhexanol toxicity 165
**Vegetables** protective effect against cyclophosphamide and benzo[*a*]pyrene clastogenicity 637
**Vehicle exhaust gases** children's cancer and 6.V
**Vinclozolin** genotoxicity 12.III
**Vinyl chloride** angiosarcoma and 12.III ... exposure and mutant p53 protein 6.III
***N*-Vinylpyrrolidine** toxicity 3.X
**Vision** solvent exposure and colour impairment 151 ... toluene and colour impairment 3.VIII
**Vitamin $B_6$** heart disease and 3.V
**Vitamin $B_{12}$** chromosome damage and 9/10.III ... lower homocysteine blood levels 6.II
**Vitamin C** antioxidant activity and high fat intake 3.V ... cataracts and 78 ... high dose supplements 6.I ... modulation of sister-chromatid exchanges 897
**Vitamin D** insulin resistance and deficiency 6.I ... prostate cancer and 4.I
**Vitamin E** antioxidant activity and high fat intake 3.V ... diethylnitrosamine necrogenicity and 929 ... prostate cancer and supplements 6.I
**Vitamin $K_1$** modulation of sister-chromatid exchanges 897
**Vitamins** (*see also specific types*) modulation of sister-chromatid exchanges 897
**Vomitoxin** induced IgA Mabs and nephropathy 1095 ... modulation of interleukin-1$\beta$, interleukin-6, tissue necrosis factor-$\alpha$ secretion 409
**Vulcanization** accelerators risk assessment 849

**Water** (*see also* Drinking water) colon cancer and calcium in drinking 150 ... subchronic toxicity of antimony in rats from drinking 21
**Weight loss** blood pressure and reduction of sodium intake 6.II
**Welders** DNA damage 4.II
**Wine** eye and age-related macular degeneration 3.II
**Wingstay**® toxicity 79

**Xenobiotic metabolizing enzymes** colonic phase I and II and bile acids 601
**Xenoestrogens** occupational and breast cancer 9/10.VI

**Zinc** childhood growth 3.V ... phytase effect on bioavailability 7